

**National Transportation Safety Board
Washington, DC 20594**

Brief of Accident

Adopted 03/30/2004

DEN03FA028 File No. 15093	12/29/2002	Steamboat Spgs, CO	Aircraft Reg No. N7989C	Time (Local): 12:50 MST		
Make/Model:	Piper / PA-32-300			Fatal	Serious	Minor/None
Engine Make/Model:	Lycoming / TIO-540		Crew	0	1	0
Aircraft Damage:	Destroyed		Pass	1	2	0
Number of Engines:	1					
Operating Certificate(s):	None					
Type of Flight Operation:	Personal					
Reg. Flight Conducted Under:	Part 91: General Aviation					
Last Depart. Point: Same as Accident/Incident Location				Condition of Light: Day		
Destination: Canon City, CO				Weather Info Src: Weather Observation Facility		
Airport Proximity: Off Airport/Airstrip				Basic Weather: Visual Conditions		
				Lowest Ceiling: None		
				Visibility: 10.00 SM		
				Wind Dir/Speed: 270 / 007 Kts		
				Temperature (°C): 2		
				Precip/Obscuration: None / None		
Pilot-in-Command	Age: 53			Flight Time (Hours)		
Certificate(s)/Rating(s)				Total All Aircraft: 3500		
Commercial; Multi-engine Land; Single-engine Land				Last 90 Days: Unk/Nr		
Instrument Ratings				Total Make/Model: 600		
Airplane				Total Instrument Time: 250		

The pilot departed with three passengers and three dogs, but only two seats. The airplane had been reconfigured (STC SA00352DE) for parachute jumping operations. The STC included the stipulation that the airplane could be used only for parachutist launching operations. Also, Title 14 CFR Part 91.107, (a)(3), states that each occupant of a civil aircraft must be provided with an approved seat [the fatally injured passenger was not] with seat belt, for movement on the surface, takeoff, and landing operations. The pilot proceeded to fly up a heavily forested mountain valley with a 14 to 18 knot tail wind (increasing ground speed while reducing climb performance). The airplane's center of gravity was calculated to be 2.33 inches aft of allowable limitations. Due to insufficient altitude, the airplane impacted tree covered terrain with approximately 4 feet of snow at 9,527 feet (10,200 feet density altitude). One occupant was trapped under aircraft debris for 4 to 5 hours; she died shortly after reaching the hospital. An examination of the airplane revealed no anomalies.

Brief of Accident (Continued)

DEN03FA028				
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Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CLIMB - TO CRUISE

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
2. (F) WEATHER CONDITION - TAILWIND
3. (C) CLEARANCE - INADEQUATE - PILOT IN COMMAND
4. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
5. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND
6. (F) AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

7. TERRAIN CONDITION - MOUNTAINOUS/HILLY
8. OBJECT - TREE(S)
9. (F) MAINTENANCE, MAJOR ALTERATION - IMPROPER USE OF - PILOT IN COMMAND
10. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
11. (F) FUSELAGE, SEAT - NOT INSTALLED

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows.
the pilot's inadequate in-flight planning/decision making resulting in insufficient altitude to fly over the mountain, and the subsequent inadvertent stall/mush into tree covered mountainous terrain. Contributing factors were the tail wind and high density altitude weather conditions, the airplane's aft center of gravity condition exceeding limitations, and the improper use of the airplane by the pilot [STC limitation to haul parachutist only; two passengers flying without seats].